

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A purified endonuclease enzyme which is secreted from a human B lymphoblastic IM9 cell line ~~or a 12-tetradecanoylphorbol 13-acetate-treated U937 cell line~~ and recognizes bacterial DNA as a foreign agent and processes the DNA to produce about 10 bp single-stranded oligonucleotides including a CpG motif which is involved in immune response, wherein the endonuclease has the following physiochemical properties:

a) molecular weight: about 72.4 kD by SDS-PAGE;

b) divalent cation dependency: Mg^{2+} dependent; and

c) optimal pH: about 6.5 to 7.5.

Claim 2-5 (Canceled)

Claim 6 (Previously presented): The endonuclease enzyme according to claim 1, wherein the mobility distance of the enzyme activity by native-PAGE is apparently distinct from that of DNase I.

Claims 7-12 (Canceled)